

## Psychological Monographs: General and Applied

Parents' Attitudes vs. Adolescent Hostility  
in the Determination of Adolescents'  
Sociopolitical Attitudes<sup>1</sup>Kenneth Helfant<sup>2</sup>

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## I. INTRODUCTION

The present study began with the belief that sociopolitical attitudes are the result of a complex interweaving of personality and social factors, but that probably in most cases social factors are the more important of the two.

To bring the scope of the study within practicable limits it was decided to deal with one particular age group—children of adolescent age. Young people of this age are striving for self-expression, but

they are still strongly influenced by the ties of home and family.

The scope of the study was further limited by centering upon a comparison of two relationships: (a) the relationship between a particular social factor (parents' sociopolitical attitudes) and adolescents' sociopolitical attitudes; and (b) the relationship between a particular personality factor (adolescents' personal feelings of outwardly-directed hostility) and adolescents' sociopolitical attitudes. On the basis of existing studies in the field, it was decided that probably the most potent social force contributing to the sociopolitical attitudes of adolescents is the sociopolitical attitudes of their parents, and that probably the most potent personality factor influencing sociopolitical attitudes of adolescents is their personal feeling of outwardly-directed hostility, which finds expression, through the mechanism of displacement, in sociopolitical attitudes.

The particular sociopolitical attitudes selected for study were attitudes toward Russia, attitudes toward international relations in general, and attitudes toward war. Attitudes toward Russia were selected for study because relations with that country were at the time in the forefront of public discussion. For the

<sup>1</sup>I am very grateful to the many people who have assisted me in the planning and carrying out of this study.

Professors Goodwin Watson and S. Stansfeld Sargent were especially helpful in helping me to organize my thoughts and design the experiment. In the collection of the data the cooperation of the principals, teachers, students, and parents of Teaneck, Bergenfield, and Dumont High Schools in New Jersey was such as to give me added incentive to produce results worthy of their efforts in my behalf. In analyzing and writing up the results Professor Irving Lorge gave advice and stimulation without which I would have been unable to realize the full significance of the data.

Special thanks are due to Miss Anne McKillop for her repeated reading and rereading of the manuscript, providing me with a sounding board from which my ideas were reflected enriched by her constructive criticisms and cogent suggestions.

<sup>2</sup>Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, in the faculty of Philosophy, Columbia University, 1951.

same reason, however, it was thought that attitudes toward Russia might represent a special case, and not adequately reflect more general underlying factors in attitude formation. For this reason, in addition to attitudes toward Russia, study was given to attitudes toward international relations in general, and toward war.

So limited, the study presents these hypotheses:

1. Adolescents' attitudes toward Russia, international relations, and war are significantly related to:

a. The attitudes of the adolescents' parents on the same topics.

b. The adolescents' personal feelings of outwardly-directed hostility.

2. Adolescents' attitudes toward Russia, international relations, and war are more closely related to the attitudes of the adolescents' parents on the same topics than to the adolescents' personal feelings of outwardly-directed hostility.

## II. SUBJECTS, INSTRUMENTS, AND PROCEDURES

The over-all plan of this experiment was to give a battery of attitude scales and personality tests to a group of high-school seniors, and then to give the same battery of attitude scales (but not the personality tests) to their parents. The correlations between attitudes of parents and of children were then calculated, as were the correlations between the attitudes of children and the factor measured by the personality tests (personal feelings of outwardly-directed hostility).

### A. SUBJECTS

Teaneck High School, located in the homogeneous upper middle-class community of Teaneck, in northeastern New Jersey, was selected as the locale for this

experiment. Nine regular senior classes in American history (212 students), judged by the high-school principal and the teachers of the classes to be representative of the entire senior class (350 students), were used as the original sample. Forty-six students were eliminated because their parents could not be reached or because of failure to complete the tests. The final sample consisted of the remaining 166 high-school seniors (84 boys and 82 girls) and their parents (165 mothers, and 165 fathers).

### B. INSTRUMENTS

#### *The Attitude Scales*

For the purposes of this study we accept Chein's definition of an attitude as "a disposition to evaluate certain objects, actions, and situations in certain ways" (1, p. 177).

1. *A Survey of Opinions and Beliefs about Russia*. Originally it was hoped that the G. H. Smith scale for the measurement of attitudes toward Russia (7) might be used for this study, but it was found, when the Smith scale was given to a pilot group, that there tended to be a piling up of scores at the lower (unfavorable toward Russia) end of the scale. A new scale was therefore constructed by the experimenter, according to the Likert technique of attitude-scale construction. The scale, which includes 7 items from the original Smith scale, is reproduced below.

As a check on internal consistency, in addition to the usual steps in scale construction according to the Likert technique, the final scale was subjected to an item analysis. The split-group method was used, and all items of the scale were found to differentiate the high from the low scoring group for each of the three

A SURVEY OF OPINIONS AND BELIEFS ABOUT RUSSIA\*

DIRECTIONS: Indicate your feeling about each statement by putting a check (✓) in the appropriate column. Be sure to put a check after every statement.

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
1. In my opinion, the Russian leaders will honestly support a United Nations plan to keep the peace.....	5	4	3	2	1
2. I feel that at present Russia is the curse of mankind.....	1	2	3	4	5
3. It is my belief that Russia's ways of doing things are quite as good as ours....	5	4	3	2	1
4. I feel friendly toward Russia.....	5	4	3	2	1
5. The Russian form of government makes slaves out of people.....	1	2	3	4	5
6. I think that the U.S. should tell Russia that if they take over one more country we will declare war.....	1	2	3	4	5
7. It seems to me that it would be a good thing for this country if a few of the Russian ideas and practices were adopted by the U.S.....	5	4	3	2	1
8. Even in peacetime the Soviet leaders use force to hold the mass of Russian people in place—make them do things against their will.....	1	2	3	4	5
9. I believe that Russia is a dictatorship worse than that of Hitler.....	1	2	3	4	5
10. In my opinion Russia is better than most newspapers would make us believe....	5	4	3	2	1
11. I have an unfavorable attitude toward Russia.....	1	2	3	4	5
12. It is my feeling that the Soviet Union is likely to start another European war, sooner or later.....	1	2	3	4	5
13. I believe that Russia sincerely wants to see the people in the small countries of Europe decide their own form of government.....	5	4	3	2	1
14. I like more things about Stalin than I dislike.....	5	4	3	2	1
15. I think that trying to get along with Russia is a waste of time.....	1	2	3	4	5
16. I believe that the Russian leaders are sincerely interested in the welfare of the common man.....	5	4	3	2	1

\* The small numbers which appear in the boxes after each item were not in the scale when it was presented to the subjects of the experiment, but indicate the score given to a check in that box. A high score indicates a friendly attitude toward the variable being measured, while a low score indicates an unfriendly attitude toward the variable.

groups (students, mothers, and fathers). As a further check on validity, the students in the experimental group were asked to estimate their attitude toward Russia on a linear scale, and the correlation between self-ratings and score on the attitude scale was found to be .78.

The reliability of the scale was calcu-

lated by the split-half method. The correlation coefficients so obtained, when corrected by the Spearman-Brown prophecy formula, were .92 for the students, .86 for mothers, and .89 for fathers.

2. Survey of Opinions and Beliefs

*about International Relations.* An attitude of hostility in international relations is defined as being indicated by strong tendencies to criticize, reject, or coerce foreign countries or peoples, and feelings that we should take a more militant stand in international relations. A scale to measure such feelings was con-

structed by the experimenter according to the Likert technique of attitude-scale construction. It is reproduced below.

As a check on internal consistency, in addition to the usual steps in scale construction according to the Likert technique, the final scale was subjected to an item analysis. The split-group method

#### A SURVEY OF OPINIONS AND BELIEFS ABOUT INTERNATIONAL RELATIONS\*

**DIRECTIONS:** Indicate your feeling about each statement by putting a check (✓) in the appropriate column. Be sure to put a check after every statement.

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
1. In my opinion, the United States should give up trying to be on friendly terms with other countries.....	1	2	3	4	5
2. I think that if the United States is friendly toward other countries they are not as likely to be aggressive toward us.....	5	4	3	2	1
3. In my opinion, only foolish dreamers believe that international friendliness can accomplish anything in the modern world.....	1	2	3	4	5
4. I feel that in international relations it is just plain common sense to "love thy neighbor as thyself".....	5	4	3	2	1
5. I believe that the U.S. should send food and materials to any country that needs them.....	5	4	3	2	1
6. In my opinion, we shouldn't risk our happiness and well-being by getting involved with other countries.....	1	2	3	4	5
7. I think that helping foreign countries is a waste of money.....	1	2	3	4	5
8. In my opinion, international good will is essential to the welfare of the United States.....	5	4	3	2	1
9. It is my belief that we should get even with any country that tries to take advantage of the United States.....	1	2	3	4	5
10. I feel that we can't have "peace on earth, good will to men," because other nations are not of good will.....	1	2	3	4	5
11. I think that being friendly with other countries will do more good than harm.....	5	4	3	2	1
12. It is my feeling that we should try to help all nations, whether we get anything special out of it or not.....	5	4	3	2	1
13. I think that other countries are always getting us into wars.....	1	2	3	4	5
14. I think that being friendly with other nations is a real help in solving international problems.....	5	4	3	2	1
15. It is my belief that other nations are often plotting against us.....	1	2	3	4	5
16. In my opinion, all sensible people believe in trying to be friendly with other countries.....	5	4	3	2	1

\* See footnote to questionnaire on p. 3.



was used, and all items of the scale were found to differentiate the high from the low scoring group for each of the three groups. As a further check on validity, the students in the experimental group were asked to estimate their attitude toward international relations on a linear scale, and the correlation between self-ratings and score on the attitude scale was found to be .70.

The reliability of the scale was calculated by the split-half method. The correlation coefficients so obtained (corrected by the Spearman-Brown formula) were .84 for students, .71 for mothers, and .81 for fathers.

3. *Survey of Attitudes Toward War.* This scale consisted of the 16 most differentiating items from Likert's 18-item adaptation of the original Drobe-Thurstone attitude-toward-war scale (2). The 16 most differentiating items were determined by giving the 18-item scale to a pilot group and conducting an item analysis of the results. The two items from Likert's adaptation which were eliminated because of their low differentiating power were Items 4 ("An organization of all nations is imperative to establish peace") and 6 ("War brings

misery to millions who have no voice in its declaration").

The following are representative items from the scale: "The benefits of war outweigh its attendant evils," "In the supreme offer of his life on the battlefield, a man attains to the greatest heights of glory," "It is our duty to serve in a defensive war," "It is the moral duty of the individual to refuse to participate in any way in any war, no matter what the cause."

The reliability of the attitude-toward-war scale was determined by the split-half method (corrected by the Spearman-Brown formula) and found to be .77 for the students, .59 for the mothers, and .49 for the fathers.

4. *Intercorrelations Among Attitude-Scale Scores.* Table 1 presents the intercorrelations between the various scale scores for adolescents, mothers, and fathers respectively. In every case, a high score on the attitude scales indicated a friendly feeling toward the country, idea, or institution involved.

As can be seen from Table 1, the intercorrelations between the scales are all low. The intercorrelations are highest for the adolescents (absolute average

TABLE I  
INTRAGROUP CORRELATIONS AMONG SCORES ON THE ATTITUDE SCALES

Group	Attitude	Friendliness in Int'l Rel's	Approval of War
Students	Approval of Russia	.30*	-.26*
	Friendliness in Int'l Rel's	...	-.29*
Mothers	Approval of Russia	.17*	-.10
	Friendliness in Int'l Rel's	...	-.05
Fathers	Approval of Russia	.25*	-.16*
	Friendliness in Int'l Rel's	...	-.05

\* Significant at .05 level.

$r = .28$ ), next for the fathers (absolute average  $r = .15$ ), and lowest for the mothers (absolute average  $r = .11$ ). Adolescent attitudes of friendliness in international relations and approval of war are negatively related to a statistically significant degree ( $r = -.29$ ), while the correlations between these two attitudes for mothers and fathers show that their attitudes on these topics are unrelated ( $r = -.05$  in both cases). The differences between the correlations, attitude of friendliness in international relations vs. attitude of approval of war for mothers and fathers, as compared with that for adolescents, are significant at the .05 level. There are no gross discrepancies in the intercorrelations between the scales, inasmuch as the signs of the correlation coefficients are all what we would expect if the scales are measuring what they purport to measure.

#### *Measures of Students' Personal Feelings of Outwardly-Directed Hostility*

For the purposes of this study, personal feelings of outwardly-directed hostility are defined as strong tendencies to criticize, rebel against, coerce, or reject persons or things; feelings that one must fight to get along, that one would like to destroy or mutilate objects or persons in one's environment, that offense is a good defense. In an attempt to measure the amount of such feelings that students had, the following instruments were used: (a) a questionnaire of the semi-projective type (the Like-Dislike Scale), adapted from a part of the Interests and Activities Questionnaire used by the Progressive Education Association in their evaluation of the Eight Year Study; and (b) the Rosenzweig Picture-Frustration Study.

1. *The Study of Likes and Dislikes.* The 34 items from the original Interests and Activities Questionnaire of the Progressive Education Association (6) which were designed to measure aggressive thoughts and actions were interspersed with 66 other items which were simply fillers. Instead of asking students to mark the items on a three-point scale (Like?—Dislike), as in the original questionnaire, a five-point scale (Like very much—Like?—Dislike—Dislike very much) was used.

Following are some representative items which when marked "Like very much" (L+) or "Like" (L) were considered to indicate feelings of outwardly-directed hostility: "Throwing spit balls," "Watching a good fight," "Picking somebody's argument to pieces," "Looking at pictures of death and destruction."

The odd-even reliability coefficient for the relevant items of the Like-Dislike Scale was found to be .88 (corrected by Spearman-Brown formula).

2. *Rosenzweig Picture-Frustration Study.* This test was first described by Rosenzweig in 1945 (4). It consists of 24 cartoons depicting people in mildly frustrating situations and requires the testee to fill in the "balloon" above the frustrated person.

The following are some typical situations depicted in the cartoons to which the subjects are asked to respond: (a) The driver of an automobile is apologizing to a pedestrian for having splashed the latter's clothing (cartoon #1), (b) A customer is complaining to a clerk that she has brought back a new watch three times now because it refuses to go (cartoon #5), (c) A woman is apologizing to her partner in a card game for having made a stupid play

(cartoon #15), (d) A man returning a torn newspaper explains apologetically that the baby caused the damage (cartoon #24). The instructions for the test are as follows: "Each of the following pictures contains two or more people. One person is always shown talking to another. You are asked to write in the empty space the very *first* reply that comes into your mind. Avoid being humorous. Work as fast as you can."

The test booklets were scored according to the directions given by Rosenzweig *et al.* (5), but only the extrapunitive score was used for the purposes of this study. Rosenzweig describes extrapunitive responses as follows (3): "Extrapunitive responses are those in which the individual aggressively attributes the frustration to external persons or things. The associated emotions are anger and resentment."

The correlation between scores on the Like-Dislike Scale and the extrapunitive scores was calculated and found to be .39, indicating a statistically significant, though not high, degree of community between the two instruments.

### *Measure of Student Intelligence*

Because previous studies have found a positive relationship between intelligence and internationalist point of view, it was thought that a measure of intelligence should be included in order to be certain that this relationship was not confounding the relationships under study. A 20-word vocabulary test adapted by R. L. Thorndike from the I.E.R. Intelligence Scale: C.A.V.D. (8) was therefore administered to all student subjects.

### *Measures of Certain Background Factors*

*The Parent Interview.* In order to obtain further qualitative and quantitative

information about the subjects of this experiment, a parent-interview form was constructed by the experimenter for use in interviews with parents of the adolescents. The parent-interview form was designed to give measures of: (a) amount of conversation about international relations that goes on in the home in the presence of the children; (b) amount of parental contact with other countries; (c) amount of parental and adolescent church attendance; (d) parental attitude toward the attitude scales; and (e) parental economic position.<sup>3</sup> Items (a), (b), (c), and (e) above were assigned numerical indices on the basis of the answers given to the relevant questions in each case.<sup>4</sup>

A quantitative measure of the reliability of the parents' answers to the questions on the parent-interview form was not obtained. The subjective impression of the experimenter and of the other interviewers was that parents had no difficulty or resistance in accurately answering the questions.

### C. PROCEDURE

The students were given all the scales and tests listed above (with the exception, of course, of the parent-interview form) during their regular classes in American history. Two full class periods of 50 minutes each were required to complete the testing of the students. All student testing was done by the experimenter. The students were urged to fill out all scales and tests as frankly as possible, and assured that the results would not affect their school grades or records in any way. In order to further insure

<sup>3</sup> A copy of the parent-interview form and an explanation of the scoring system appear in Appendix A.

<sup>4</sup> The replies to item (d) were categorized and appear in Appendix B.

frank answers, students were not required to put their names on any of the scales or tests, but they were identified by means of a coding system.

The parents of the students were interviewed individually in their homes. During the course of the interview they were given the attitude scales, which they filled out themselves in the presence of the interviewer. After the attitude scales had been filled out and interviewers had checked them to see that all items were answered, the parents were asked the questions on the parent-interview form, the interviewer writing down the answers. The interviewing was done by the experimenter and three graduate students from the Department of Sociology, Graduate Faculties, Columbia University.

The experimenter met with the interviewers before the actual interviewing began and explained the purposes and methods of the study in detail. A stand-

ard method for conducting the interviews was agreed upon, and while the interviewing was going on, periodic meetings were held to discuss any problems that came up. The experimenter went along to at least one of the interviews conducted by each interviewer to be certain that the agreed-upon standardized procedure was being followed.

### III. ANALYSIS OF THE DATA

Because the hypotheses which this study was designed to test (see Ch. I) involve measurement of degree as well as kinds of relationships, it was decided that a correlational method of analysis was most appropriate. Table 2 presents the intercorrelations and the means and standard deviations of the scores on each of the major tests and scales administered to the 166 high-school seniors and their parents (165 mothers and 165 fathers).

The differences among the means of

TABLE 2  
INTERCORRELATIONS, MEAN SCORES, AND STANDARD DEVIATIONS  
OF THE MAJOR VARIABLES

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Student approval of Russia.....	...	.28*	.18*	.30	.04	.13	-.26*	-.20*	-.06	-.05	-.02
2. Mothers' approval of Russia.....	...	...	.37*	.23*	.17*	.18*	-.13	-.10	.04	.02	.01
3. Fathers' approval of Russia.....	...	...	...	.22*	.16*	.25*	-.13*	-.13	-.16*	.05	.02
4. Student attitude of friendliness in Int'l Rel's.....	...	...	...	...	.11	.27*	-.29*	-.16*	-.04	-.13*	-.25*
5. Mothers' attitude of friendliness in Int'l Rel's.....	...	...	...	...	...	.32*	-.03	-.05	.01	.04	-.10
6. Fathers' attitude of friendliness in Int'l Rel's.....	...	...	...	...	...	...	-.13	-.11	-.05	.03	-.06
7. Student approval of war.....	...	...	...	...	...	...	...	.16*	.05	.16*	.12
8. Mothers' approval of war.....	...	...	...	...	...	...	...	...	.16*	-.02	-.01
9. Fathers' approval of war.....	...	...	...	...	...	...	...	...	...	-.06	.01
10. Student hostility (Like-Dislike).....	...	...	...	...	...	...	...	...	...	...	-.39*
11. Student hostility (Rosenzweig).....	...	...	...	...	...	...	...	...	...	...	...
Mean scores.....	36.5	37.5	35.6	38.4	56.5	56.8	47.2	48.3	40.4	88.2	53.5
Standard deviations.....	10.0	7.8	9.2	8.1	6.6	8.4	8.2	5.1	5.2	17.6	15.4

\* Correlations which are significant at the .05 level of confidence (which has been adopted as the level of statistical significance for this study) are marked with an asterisk.



the scores of parents and adolescents are not statistically significant for any of the attitude scores. The differences among the standard deviations of the attitude scores of students and their mothers are statistically significant<sup>5</sup> for all three of the attitudes measured. The differences between the standard deviations of the students' and fathers' scores on the attitude-toward-war scale, and the differences between the standard deviations of the mothers' and fathers' scores on the attitude-toward-international-relations scale are also statistically significant. This is to say that, in this sampling, mothers as a group showed a more homogeneous attitude

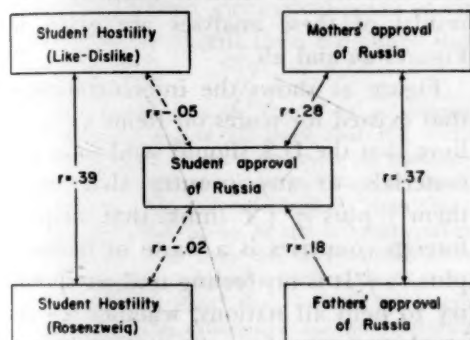


FIG. 1.—Attitude of approval of Russia. (Intercorrelations among student attitudes of approval of Russia, parents' attitudes of approval of Russia, and student personal feelings of outwardly-directed hostility.)

toward Russia than their children, a more homogeneous attitude toward international relations than either their children or their husbands, and that both mothers and fathers showed more homogeneous attitudes toward war than their children.

Figures 1 through 3 illustrate the re-

<sup>5</sup> This was determined by the  $F$  test, where 
$$F = \frac{s_2^2}{s_1^2}$$

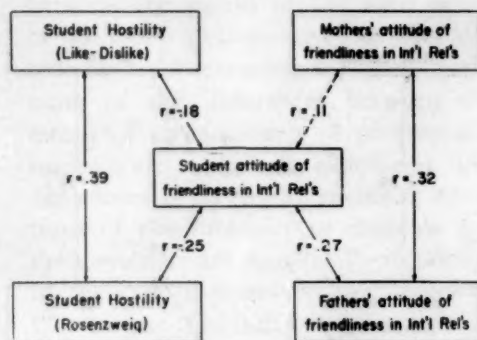


FIG. 2.—Attitude of friendliness in international relations. (Intercorrelations among student attitudes of friendliness in international relations, parents' attitudes of friendliness in international relations, and student personal feelings of outwardly-directed hostility.)

relationships among the major variables. In every case, a high score on the measures of hostility indicated hostile feelings, while a high score on the measures of attitudes indicated a friendly attitude toward the country, idea, or institution involved. A solid line joining two variables indicates that the correlation between the two variables is significant at the .05 level. A dotted line joining two variables indicates that the correlation between the two variables is not statisti-

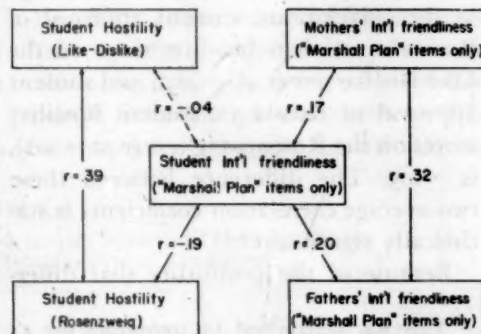


FIG. 2a.—Attitude of friendliness in international relations: "Marshall Plan" items only. (Intercorrelations among student attitudes of friendliness on "Marshall Plan" items of international-relations scale, parents' attitudes of friendliness on these items, and student personal feelings of outwardly-directed hostility.)

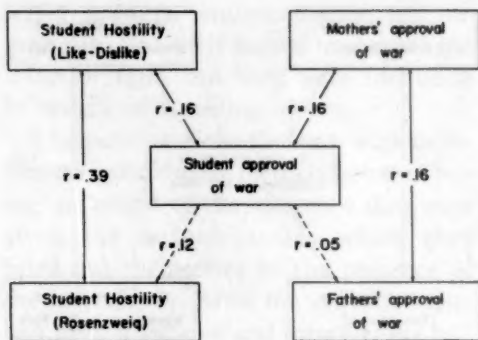


FIG. 2b.—Attitude of friendliness in international relations: "Ideological" items only. (Intercorrelations among student attitudes of friendliness on "Ideological" items of international-relations scale, parents' attitudes of friendliness on these items, and student personal feelings of outwardly-directed hostility.)

cally significant. In these figures and in the discussion which follows, when we speak of student hostility or of student or parent attitude, we are referring to scores on the instruments used for measuring hostility and attitudes.

The average of the correlations, student approval of Russia vs. mothers' approval of Russia ( $r = .28$ ), and student approval of Russia vs. fathers' approval of Russia ( $r = .18$ ), is .23. The average of the correlations, student approval of Russia vs. student hostility score on the Like-Dislike test ( $r = -.05$ ), and student approval of Russia vs. student hostility scores on the Rosenzweig test ( $r = -.02$ ), is  $-.03$ . The difference between these two average correlation coefficients is statistically significant.<sup>6</sup>

Because of the possibility that differ-

<sup>6</sup>This was determined by converting the  $r$ 's to Fisher's  $z$ 's and using the formula

$$t = \frac{z_1 - z_2}{\sigma_{z_1 - z_2}}$$

where

$$\sigma_{z_1 - z_2} = \frac{1}{N_1 - 3} + \frac{1}{N_2 - 3}$$

ent items from the international relations scale might have been interpreted differently, in spite of the precautions taken against this when the scale was constructed, it was thought that it might be fruitful to examine separately the relationships between student and parent attitudes, and student hostility and student attitudes, for separate groups of items from the scale. Accordingly, two groups of items which were thought to represent different ways of looking at international relations were scored separately for each of the three experimental groups (students, mothers, and fathers), and these subscores intercorrelated among experimental groups and with the measures of student hostility. The results of these analyses are given in Figures 2a and 2b.

Figure 2a shows the intercorrelations that existed for scores on Items 5 ("I believe that the U.S. should send food and materials to any country that needs them") plus 7 ("I think that helping foreign countries is a waste of money") plus 12 ("It is my feeling that we should try to help all nations, whether we get anything out of it or not"). It was

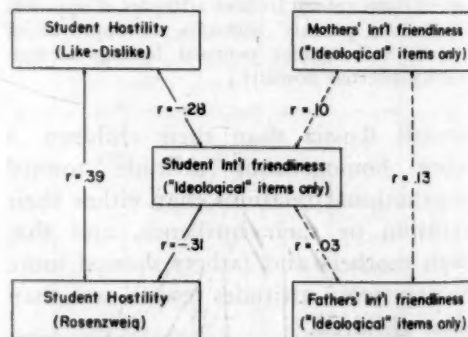


FIG. 3.—Approval of war. (Intercorrelations among student attitudes of approval of war, parents' attitudes of approval of war, and student personal feelings of outwardly-directed hostility.)

thought that these three items, because they all refer to helping other countries, might be interpreted in terms of attitudes toward the Marshall Plan to a greater extent than others.

Figure 2*b* shows the intercorrelations that existed for scores on Items 1 ("In my opinion, the United States should give up trying to be on friendly terms with other countries") plus 11 ("I think that being friendly with other countries will do more good than harm") plus 14 ("I think that being friendly with other countries is a real help in solving international problems") plus 16 ("In my opinion all sensible people believe in trying to be friendly with other countries"). These four items were thought to represent an abstract ideological point of view to a greater extent than the other items of the scale.

The correlations in Figure 2*a* as compared to those in Figure 2*b* show that the correlations between student attitudes of friendliness in international relations and student hostility are higher for the "ideological" than for the "Marshall Plan" items of the international-relations scale, and that the correlations between parents' and students' attitudes are higher for the "Marshall Plan" than for the "ideological" items, but the differences are not statistically significant.

The means and standard deviations of the subscores intercorrelated in Figures 2*a* and 2*b* appear in Table 3.

As in the case of the differences

between the means of the total scores of students and parents on the attitude-toward-international-relations scale, none of the differences between the means of the subscores of parents and students are statistically significant. The differences between the standard deviations of the subscores of students and their mothers are statistically significant in the case of scores on the "Marshall Plan" items. The differences between the standard deviations of the subscores of mothers and fathers are statistically significant in the case of scores on both the "Marshall Plan" and the "ideological" items. That is to say, mothers, as a group, showed more homogeneous attitudes on the "Marshall Plan" items of the attitude-toward-international-relations scale than their children, and had more homogeneous attitudes on both the "Marshall Plan" and "ideological" items of the international-relations scale than their husbands.

Because of the low reliability of the attitude-toward-war scale, it was thought that, as in the case of the attitude-toward-international-relations scale, it might be fruitful to examine the relationships under investigation separately for separate groups of items from the scale. Accordingly, two groups of items which were thought to represent different aspects of attitude toward war were

TABLE 3  
MEANS AND STANDARD DEVIATIONS OF THE SUBSCORES FROM THE SCALE  
ON ATTITUDE TOWARD INTERNATIONAL RELATIONS

Subscore	Mean	Standard Deviation
Students' scores on "Marshall Plan" items.....	10.5	2.4
Mothers' scores on "Marshall Plan" items.....	10.5	2.0
Fathers' scores on "Marshall Plan" items.....	10.2	2.4
Students' scores on "ideological" items.....	16.6	2.1
Mothers' scores on "ideological" items.....	15.8	1.9
Fathers' scores on "ideological" items.....	15.9	2.2

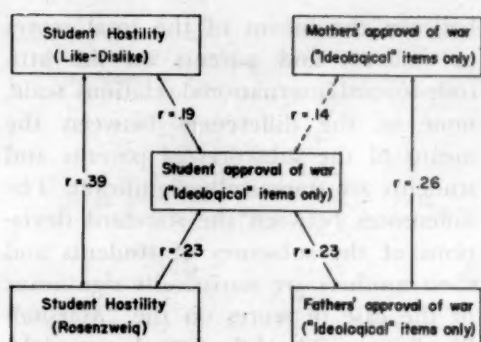


FIG. 3a.—Approval of war: "Personal Participation" items only. (Intercorrelations among student attitudes of approval of war based only on "Personal-Participation" items of the attitude-toward-war scale, parents' attitudes of approval of war based on these items, and student personal feelings of outwardly-directed hostility.)

scored separately for each of the experimental groups (students, mothers, and fathers) and intercorrelated among experimental groups and with the measures of student hostility. The results of these analyses are given in Figures 3a and 3b.

Figure 3a shows the intercorrelations that existed for scores on the items "The benefits of war outweigh its attendant evils" plus "War in the modern world is as needless as it is suicidal" plus "There is no progress without war." It was thought that these three items represent an abstract ideological attitude toward war to a greater extent than the other items of the scale.

Figure 3b shows the intercorrelations that existed for scores on the items "If a man's country enters a war which he does not consider justified, he should nevertheless serve at the front or wherever he is needed" plus "It is our duty to serve in a defensive war" plus "He who refuses to fight is a true hero" plus "It is the moral duty of the individual to refuse to participate in any way in any war, no matter what the cause." It was

thought that these four items represented an attitude toward personal participation or actual behavior in time of war to a greater extent than the other items of the scale.

The correlations in Figure 3a as compared to those in Figure 3b show that the correlations between student attitudes of approval of war and student hostility are higher for the "ideological" than for the "personal-participation" items of the attitude-toward-war scale, and that the correlations between parents' and students' attitudes are of different signs for the "personal-participation" items as compared with the "ideological" items. The differences between the correlations student-father and father-mother for the "ideological" items of the war scale (Fig. 3a) and for the "personal-participation" items of the war scale (Fig. 3b) are statistically significant.

The means and standard deviations of the subscores intercorrelated in Figures 3a and 3b appear in Table 4.

As in the case of the differences between the means of total scores of students and parents

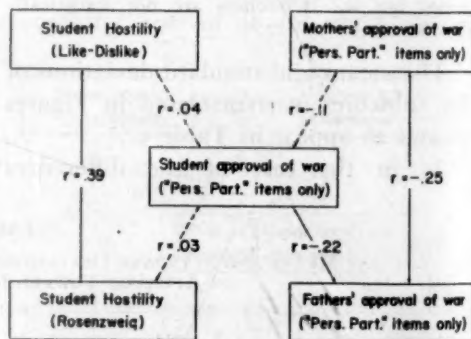


FIG. 3b.—Approval of War: "Ideological" items only. (Intercorrelations among student attitudes of approval of war based only on "Ideological" items of the attitude-toward-war scale, parents' attitudes of approval of war based on these items, and student personal feelings of outwardly-directed hostility.)



TABLE 4  
MEANS AND STANDARD DEVIATIONS OF THE SUBSCORES FROM THE  
SCALE ON ATTITUDE TOWARD WAR

Subscore	Mean	Standard Deviation
Students' subscores on "ideological" items.....	5.7	2.4
Mothers' subscores on "ideological" items.....	6.2	2.0
Fathers' subscores on "ideological" items.....	6.1	2.0
Students' subscores on "personal-participation" items.....	16.6	2.7
Mothers' subscores on "personal-participation" items.....	16.2	0.6
Fathers' subscores on "personal-participation" items.....	16.8	1.8

on the attitude-toward-war scale, none of the differences between the means of the subscores of parents and students are statistically significant. The differences between the standard deviations of the subscores of mothers and their children and mothers and their husbands are statistically significant in the case of both the "ideological" and "personal-participation" items of the attitude-toward-war scale. The differences between the standard deviations of the subscores of fathers and their children are statistically significant in the case of the "personal-participation" items. This is to say, that mothers, as a group, had a more homogeneous attitude on both the "ideological" and "personal-participation" items of the attitude-toward-war scale than either their children or their husbands, and that fathers, as a group, had a more homogeneous attitude on the "personal-participation" items of the attitude-toward-war scale than their children.

#### *Effect of Home Conversation about International Relations*

The correlations between indices of amount of home conversation about international relations and scores on the attitude tests were all small and lacked statistical significance. The scores were further analyzed by subgroups, because it was thought that this procedure might reveal a relationship which was being obscured or minimized by the Pearson correlation technique. Accordingly, separate correlations were calculated for the two extreme groups: parents who reported that they talked a great deal about international relations with their children ( $N = 48$ ), and parents who re-

ported that they did not talk at all about international relations with their children ( $N = 39$ ). The results of this analysis showed that correlations between adolescents' and parents' attitudes were generally greater in homes where parents and children discussed international relations than in homes where they did not, but the increases in the correlations were not statistically significant.

In order to find whether there were any differences in the kind of attitudes held when there was a great deal of conversation about international relations in the home as compared to when there was none, the mean scores of adolescents, mothers, and fathers were calculated separately for these two extreme groups. The results of this comparison showed that the mean scores on the attitude tests were the same whether there was no conversation or a great deal of conversation about international relations in the home.

#### *Effect of Parental Contact with Other Countries*

Indices of amount of parental contact with other countries (obtained from answers to questions under Section 2 of the parent-interview form) were correlated with all other data, and found to be significantly correlated only with

students' vocabulary-test scores ( $r = .19$ ), and home-conversation scores ( $r = .22$ ).

Because, as in the case of home conversation about international relations, it was thought that there might be a relationship between amount of parent contact with other countries and students' and parents' attitudes which was being masked by the Pearson correlational technique, it was thought advisable to compare the mean attitude scores of the two extreme groups in this respect. Parents who received a score of zero in "amount of contact with other countries" ( $N = 12$ ) were compared with those who received the highest possible score ( $N = 21$ ). No statistically significant differences were found. Thus, neither the comparison of extreme groups nor the correlational method of analyzing the data revealed any significant relationships between the attitudes studied and amount of parental contact with other countries.

#### *Effect of Frequency of Church Attendance*

Indices of the frequency of adolescents' church attendance (obtained from answers to Section 3 of the parent-interview form) were correlated with all other data, and found to be significantly correlated with student attitudes toward international relations ( $r = -.22$ ).

#### *Effect of Economic Position of Parents*

Indices of the economic positions of the parents used in this study (obtained from answers to questions under Section 5 of the parent-interview form) were correlated with all other data, and found to be significantly correlated with student vocabulary scores ( $r = .28$ ), and mothers' attitude-toward-war scores ( $r = .21$ ).

#### *Effect of Adolescent Intelligence*

Adolescent vocabulary scores, which were taken as a measure of adolescent intelligence, were correlated with all the data collected, and found to be significantly correlated with adolescents' attitudes toward international relations ( $r = .21$ ), attitudes toward war ( $r = .20$ ), mothers' attitudes toward international relations ( $r = .20$ ), and index of parental economic position ( $r = .28$ ).

Because it was thought that the correlation between intelligence and adolescents' attitudes toward international relations and war might be confounding the correlations between adolescents' and parents' attitudes on these topics, the correlations between adolescents' and parents' attitudes on these topics were recalculated with vocabulary score partialled out. It was found that this procedure had a negligible effect on the adolescent-parent coefficients, and it was therefore concluded that though vocabulary score (intelligence) was correlated with attitudes toward war and toward international relations, it had no appreciable effect on the relationships under consideration.

#### IV. DISCUSSION

In general, it can be said that the original hypotheses of the study were supported in the case of some attitudes, but not in the case of others. The correlations are all small, even in the cases where the hypotheses are supported. From the results of this study as well as other studies, it is apparent that the relationships that exist between child and parent attitudes, as well as between attitudes and personality factors, are dependent upon many factors. In view of this fact, we would expect to find only small correlations between attitude and

any single factor.

The specific findings of the study will be discussed under two headings: influence of parents' attitudes, and influence of personal feelings of outwardly-directed hostility.

### *Influence of Parents' Attitudes*

From the results of this study parents appear to be more compartmentalized in their attitudes than are their children. When we examine the table of intercorrelations for the major variables (Table 2), we note that the variable, student attitude of friendliness in international relations, leads all others with respect to number of significant intercorrelations. It is significantly correlated with 8 of the principal variables of the study, while the other attitudes (student approval of war and of Russia) are significantly correlated with only 5 and 4 variables respectively. It seems likely that the reason for this is the fact that adolescents' attitudes toward international relations are derived to a considerable extent from parental discussions about specific aspects of international relations, for example, Russia and war. The parents' attitudes toward international relations, however, are not related to the same extent to specific aspects of such relations, such as war and our relations with Russia. We find that our adolescents' attitudes toward international relations are related to parental attitudes toward war and Russia, but that the adolescents' attitudes toward war and Russia are not related to parental attitudes toward international relations (Table 2). The fact that parents' attitudes, especially mothers', are not interrelated to the extent that adolescents' attitudes are, is brought out quite clearly in Table 1. The lower re-

liability of the attitude scales for the parents as compared to adolescents is a further indication that the parents are more compartmentalized in their thinking (i.e., their answers to the items of the scales show less item-to-item consistency than the answers of their adolescent offspring).

Another generalization that can be drawn from the data of this study is that adolescents tend to adopt an attitude which is somewhat more extreme or emphatic than the attitude of their parents, especially their mothers. The standard deviations of the attitude scores and subscores of the mothers are in every case smaller than those of the adolescents: significantly so for all scores and subscores except those on the "ideological" items of the international-relations scale. The standard deviations of the attitude scores and subscores of the fathers are in every case except scores and subscores on the attitude-toward-international-relations scale (where they are approximately equal) smaller than those of the adolescents: significantly so in the case of total scores on the attitude-toward-war scale and subscores on the "personal-participation" items of the attitude-toward-war scale. On examining the pattern of scores in individual cases, it appears that the reason for the greater variation in adolescent sociopolitical attitudes as compared to those of mothers and, to a lesser extent, fathers, might be that when adolescents' attitudes resemble those of their parents at all, they almost always have a more extreme score than that of their mothers (and often that of their fathers too), though in the same direction. That is, if an adolescent has a mother who has a mildly friendly attitude toward Russia, for example, the adolescent is likely to

have a distinctly friendly attitude toward Russia, and contrariwise, if the mother has a mildly unfavorable attitude toward Russia, her adolescent offspring is likely to have a distinctly unfriendly attitude toward Russia. This "leverage" theory offers an explanation of the fact that there are no significant differences among the mean scores of the adolescents and parents, but frequent significant differences among the standard deviations of their scores.

The results of the analysis of the "ideological" as compared with the "personal-participation" items of the attitude-toward-war scale (Fig. 3a and 3b) bring to light the interesting fact that, for this population, parents and children tend to have similar ideological attitudes toward war, but tend to have dissimilar attitudes toward personal participation in war. In the case of the "ideological" items, adolescents' attitudes and those of their parents are positively correlated (significantly so in the case of adolescents and fathers, very near significance in the case of adolescents and mothers), but in the case of the "personal-participation" items adolescents' attitudes and those of their parents are *negatively* correlated (significantly in the case of fathers, non-significantly in the case of mothers). The average of the correlations students vs. mothers and students vs. fathers on the "ideological" items of the war scale is .18. The average of the correlations students vs. mothers and students vs. fathers on the "personal-participation" items of the war scale is -.16. The difference between these two average correlation coefficients is statistically significant.

Most of the correlations between parents' and students' attitudes and between attitudes of husbands and wives

which are reported here are lower than those reported in other studies. This may be due to differences in samples studied, or it may be due to the fact that previous studies have depended upon the child subjects to obtain the attitudes of their parents. The sample studied here differs from others in that the children involved were exclusively adolescents within a narrow age group, and it might be said that the low degree of relationship between parent and child attitudes is a result of the adolescent revolt which caused subjects to reject the attitudes of their parents at this particular stage in their development. This does not, however, explain why the correlations between husbands and wives were lower than those usually reported, and this fact turns us toward the second possible explanation, that previous studies have depended upon the child subjects to obtain the attitudes of their parents. Since only subjects willing to obtain the attitudes of their parents were included, it is possible that in previous studies this may have had a biasing effect on the results. It seems likely that subjects who are willing to obtain the attitudes of their parents are probably more cooperative in general and have better relationships with their parents than those who are not. Such children could be expected to identify more closely with their parents, and one would expect that the relationships between their attitudes and those of their parents would be higher than those between children and parents in general. We would also expect parents to have a better-than-average relationship to each other in cases where they tend to have a better-than-average relationship with their children. Such parents would tend to identify with each other to a greater extent than in the general population,



thereby bringing about a higher relationship between their attitudes than in the general population.

### *Influence of Personal Feelings of Outwardly-Directed Hostility*

The problem that is posed by the results of this study is not whether there is a relationship between adolescents' personal feelings of outwardly-directed hostility and their sociopolitical attitudes, but why it is that relationship exists for some of the attitudes studied (international relations and war), but not for others (Russia). In other words, why is it that sometimes adolescents' attitudes show a statistically significant correlation with their personal feelings of outwardly-directed hostility, and sometimes do not? The results of this experiment suggest an hypothesis in answer to this question; it is necessary first, however, to review findings from the selected groups of items (or subscales) of the full scales.

Because of the low reliability of the attitude-toward-war scale, probably due to lack of homogeneity of the scale, the total scores on this scale have no clear-cut meaning, and it appears more reasonable to consider only the subscores on the "ideological" and "personal-participation" items of the scale. For the same reason, it appears more reasonable to consider only the "ideological" and "Marshall Plan" items of the international-relations scale. After thus limiting ourselves, we are left with five attitude scores: attitude toward Russia, scores on the "Marshall Plan," and "ideological" items of the international-relations scale, and scores on the "ideological" and "personal-participation" items of the attitude-toward-war scale. These scores may be arranged into two general categories: scores which reflect attitudes which are

subject to strong social pressures (e.g., Russia, "Marshall Plan" items of the international-relations scale, and the "personal-participation" items of the attitude-toward-war scale), and scores which are more abstract and less subject to social pressures (e.g., the "ideological" items of the scales measuring attitude toward international relations and attitude toward war).

If we examine the figures showing the correlations between the scores of adolescents on the above measures and their scores on the tests of adolescents' personal feelings of outwardly-directed hostility (Fig. 1, 2a, 2b, 3a, and 3b), it appears that the highest correlations between attitude and the measures of hostility occur for the "ideological" items of the international relations and war scales, in regard to which there tends to be little social pressure. As a matter of fact, with only one exception there are no significant relationships between any of the more specific attitudes toward which there tends to be considerable social pressure, and the measures of hostility. On the other hand, if we examine the correlations between the above scores and parents' scores, it appears that the lowest correlations between adolescent attitudes and those of their parents are on the abstract "ideological" items, toward which there tends to be less social pressure; and the highest correlations between adolescent and parental scores tend to be on the more specific attitudes toward which there tends to be considerable social pressure. The hypothesis which these results suggest is that *when social pressures with regard to an attitude are strong—as they are, for example, in the case of attitudes toward Russia—the effect of personality factors is overruled; and, conversely, when social pres-*

*asures with regard to an attitude are not strong, the attitude held is more likely to be consistent with the person's characteristic ways of reacting.* This hypothesis offers an explanation for many attitudinal phenomena the explanation for which is at present not very satisfactory. It offers an explanation, for example, of why many Southern whites who do not seem to be displacing personal feelings of hostility nevertheless have strongly hostile attitudes toward Negroes: it may be because of the social pressure from their own group, which would ostracize them if they professed any but the (Southern) socially approved attitude.

The instruments used in this experiment were not designed to test the above hypothesis, and it seems likely that the exceptions to it that were found may be due to this fact. None of the so-called "Marshall Plan" items actually mention the Marshall Plan, and it seems likely that these items were interpreted in a general abstract way as well as in terms of the specific "Marshall Plan." This may be why there was a statistically significant correlation between adolescents' scores on these items and their scores on the Rosenzweig test. Similarly, the "ideological" items are not strictly "ideological" and free from social pressures, as we would like in order to test the hypothesis; and this may be why there is a statistically significant correlation between adolescents' and fathers' scores on the "ideological" items of the attitude-toward-war scale. In addition to the fact that our instruments were not designed to test the above hypothesis, we have of necessity concerned ourselves with only a fragment of the social and personality forces acting on the individual.<sup>7</sup> To test the hypothesis adequately would take a different and more elabor-

ate study than this one, but one which might add considerably to our knowledge of the way attitudes are formed and function in the life of the individual.

## V. SUMMARY

The present study began with the belief that sociopolitical attitudes are the result of a complex interweaving of personality and social factors, but that probably, in most cases, social factors are the more important of the two. An experiment was conducted to test this belief by investigating the relationship among sociopolitical attitudes of 166 adolescents (high-school seniors), sociopolitical attitudes of their parents (165 mothers and 165 fathers), and some measures of adolescent hostility.

The sociopolitical attitudes investigated were (a) attitudes toward Russia, (b) attitudes toward international relations, and (c) attitudes toward war. The scales on attitude toward Russia and attitude toward international relations were constructed by the experimenter using the Likert technique; the scale on attitude toward war consisted of a 16-item Likert version of Droba's scale.

The measures of hostility consisted of the extrapunitive scores of the adolescents on the Rosenzweig Picture-Frustra-

<sup>7</sup> As was stated in Section I, in planning this study, an attempt was made to select factors which seemed most important in determining the sociopolitical attitudes of adolescents. There is a question, however, as to whether each of the "most potent" factors affecting sociopolitical attitudes of adolescents which have been selected are equally "most potent." On the side of social forces, it seems likely that we have what is probably the "most potent" factor (parents' attitudes). In the personality sphere, however, we may have what is only "somewhat potent" rather than "most potent." A fuller measurement of personality factors might lead to higher correlations with this aspect.

tion Study, and their scores on a Like-Dislike scale of a semiprojective type, adapted by the experimenter from a scale used for the measurement of aggressive impulses by the Progressive Education Association in the evaluation of the Eight Year Study.

Measures of adolescents' intelligence, amount of conversation about international relations that went on in their homes, amount of parental contact with other countries, frequency of church attendance, and parental economic position were obtained.

The attitude scales and personality tests were given to the adolescents during their regular classes in American history, and parents' attitudes were obtained by administering the attitude scales to the parents during the course of interviewing them in their homes. All variables were expressed in terms of numerical scores and intercorrelated.

The main conclusions of the study were that for the population studied:

Correlations between adolescents' attitudes and those of their parents are smaller than those indicated by previous studies. Previous studies have relied on adolescents themselves to obtain the attitudes of their parents, thus introducing a selective factor which may have resulted in spuriously high correlations.

There are small but statistically significant correlations between adolescents' and mothers' attitudes toward Russia and war ( $r = .28$  and  $r = .16$  respectively); between adolescents' and fathers' attitudes toward Russia ( $r = .18$ ) and toward international relations ( $r = .27$ ); between adolescents' attitudes of friendliness in international relations and both measures of adolescent hostility (average  $r = -.26$ ); and between adolescents' attitudes of approval of war and hostility

scores on the Like-Dislike Scale ( $r = .16$ ).

Parents' attitudes (especially mothers') appear to be more compartmentalized than those of their adolescent offspring. The adolescents' attitudes studied were all significantly intercorrelated. The attitudes of fathers were significantly intercorrelated only in the case of attitudes toward Russia vs. attitudes toward international relations, and in the case of attitudes toward Russia vs. attitudes toward war. The attitudes of mothers were significantly intercorrelated only in the case of attitudes toward Russia vs. attitude toward international relations.

The influence of mothers' and (to a lesser extent) fathers' attitudes on those of their adolescent offspring tends to take the form of the adolescents adopting an attitude which is somewhat more extreme or emphatic than the attitude of their parents.

Adolescents' attitudes toward Russia are significantly more closely related to their parents' attitudes toward Russia than to their personal feelings of outwardly-directed hostility.

An analysis of subscores on groups of items from the scales on attitude toward international relations and attitude toward war suggest the hypothesis that *when social pressures with regard to an attitude are strong, the effect of personality factors is overruled; and, conversely, when social pressures with regard to an attitude are not strong, the attitude held is more likely to be consistent with the person's characteristic ways of reacting.*

Neither amount of conversation in the home about international relations nor amount of parental contact with other countries has a significant effect on the adolescents' attitudes studied nor the degree of relationship between adolescents' and parents' attitudes.

There were no statistically significant differences among mean attitude scores of adolescents and their parents, but the standard deviations of the scores show mothers as a group to have significantly more homogeneous attitudes than adolescents as a group.

Intelligence, as measured by the Thorndike 20-word vocabulary test is

significantly correlated with attitudes toward international relations and war, but was found to have a negligible effect on the relationships under investigation.

For adolescents, frequent church attendance is reliably associated with less liberal attitudes toward international relations.



# APPENDIX A

## PARENT INTERVIEW FORM<sup>1</sup>

Name .....

Address ..... Tel. No. ....

Score

### 1. Do you talk about international relations here at home?

- (1) ( ) never (2) ( ) rarely (3) ( ) sometimes  
(4) ( ) often

Amount of talk about international relations .....

### 2. Have you ever lived abroad? ( ) yes (2)

Do you have friends who have lived abroad? ( ) yes (1)

Do you speak any foreign languages? ( ) yes (2)

Do you have friends who speak any foreign language? ( ) yes (1)

Do you have friends who come from other countries? ( ) yes (1)

Index of contact with other countries .....

### 3. Does your son or daughter attend church?

- (1) ( ) never (2) ( ) rarely (3) ( ) sometimes  
(4) ( ) often

Index of frequency of church attendance .....

### 4. What do you think of the questionnaires you have just taken?

5. Estimated cost of house: (1) under \$10,000  
(2) \$10,000 to 15,000  
(3) \$15,000 to 20,000  
(4) \$20,000 to 25,000  
(5) over \$25,000

Estimated cost of furnishings (rate on a 5 point scale, (1) very cheap, (3) average, (5) very expensive)

Do you own a car? ( ) yes (1)

Do you have a telephone? ( ) yes (1)

What is your profession (husband)?

- (1) Unskilled worker, including laborer or domestic servant.  
(2) Semi-skilled worker.  
(3) Proprietor of small business (value less \$5000).  
(4) Skilled worker.  
(5) Clerk or kindred worker.  
(6) Semi-professional or smaller official of large business.  
(7) Professional or proprietor of large business (value more than \$5000).

Index of economic position .....

### Scoring of the Parent Interview Form

The scoring of the parent interview form consisted of simply adding up the weights assigned to an affirmative answer to each question under each of the four sections of the form for which quantitative indices were derived (Sections 1, 2, 3, and 5). The answers to Section 4 (parent reactions to the attitude scales) were written in by the interviewers and later categorized and tabulated by the experimenter. The tabulation of parental replies to this question appears in Appendix B.

<sup>1</sup>The categorization of professions used in this form is adapted from that of Warner, W. L., Meeker, M., & Eells, K. *Social class in America: A manual of procedure for the measurement of social status*. Chicago: Science Research Associates, 1947.

## APPENDIX B

# ADOLESCENT AND PARENT REACTIONS TO THE ATTITUDE SCALES

Parent reactions to the attitude scales were categorized and tabulated by the experimenter. The results of this tabulation appear in Table 5.

As can be seen from Table 5, most of the comments of the parents about the questionnaires were unfavorable.

On the basis of observation while interviewing, and after checking with the other interviewers, it is the opinion of the experimenter that the principal reason for the parents' unfavorable attitudes toward the scales was that many of the parents seemed to feel threatened by the scales, which represented a "test" to them. Although they were assured that the scales were only to get their opinions, and had no relation to their intelligence or the amount of information they possessed, they had never come in contact with scales of this sort before, and felt that they were some sort of a test or examination. The fact that the questions on the scales are overlapping and contradictory made them feel that we were trying to catch them in inconsistencies. This "threat" aspect of the scales suggests that somewhat more accurate and open expressions of opinion might have been obtained by discussion of leading questions with the interviewers, who could then have rated the attitudes of the respondents. This of course would introduce new errors in the subjective nature of the ratings of the interviewers. If a careful semi-controlled interview scheme were worked out, however, it seems likely that this method might yield somewhat more accurate measurement of attitudes than the use of attitude scales with adult subjects of the type used in this study.

The adolescents were generally enthusiastic about the study and their part in it. In answer to Item 95 of the Likes and Dislikes questionnaire, "Answering questionnaires like this," 68 per cent of the adolescents responded by circling the "Like" or "Strongly Like" symbols, 17 per cent circled the question mark, and only 15 per cent circled the "Dislike" or "Strongly Dislike" symbols. Adolescents' attitudes toward the questionnaire were given a numerical index of from 1 to 5 on the basis of their replies to Question 95 of the Likes and Dislikes scale, and these indices were correlated with all other variables. No significant correlations were found.

TABLE 5  
PARENT REACTIONS TO THE ATTITUDE SCALES

Comment	Number of Times Commented Upon
Hard to answer because need to qualify.....	41
Overlapping questions.....	16
Ambiguous.....	14
Repetitious questions.....	11
Vague.....	10
Communitistic.....	6
Drawn out.....	1
War propaganda.....	1
Shows type of citizen.....	1
Presumptuous.....	1
Loyalty test.....	1
Foolish.....	2
Satisfactory (O.K.).....	16
Good.....	8
Thorough.....	5
No comment.....	29

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Accepted for publication February 16, 1952.